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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/596,100

Applicant(s)

BALDWIN ET AL.

Examiner

BAI D. VU

Art Unit

2165

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 May 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-76 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-76 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 30 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-85/86)
Paper No(s)/Mail Date 3/12/07 and 9/26/07
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Inventor's Patent Application
6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-76 are pending in this Office Action.

Oath/Declaration

2. The applicant's oath/declaration has been reviewed by the examiner and is found to conform to the requirements prescribed in **37 C.F.R. 1.63**.

Drawings

3. The applicant's drawings submitted are acceptable for examination purpose.

Priority

4. As required by M.P.E.P. 201.14(c), acknowledgement is made of applicant's claim for priority based on Provisional Application 60/556,379 filed on 03/26/2004.

Abstract

5. The abstract of the disclosure is objected to because it should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. Correction is required. See MPEP § 608.01(b).

Claim Objections

6. Claim 1 is objected to because of the following informalities:
In claim 1 line 16, the mark ";," should be replaced by ";".
Appropriate correction is required.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. **Claims 37-76** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 37 recites “a signal”, and **claims 38 and 71** recite “a computer-readable medium” which can be interpreted to include signals as described in the instant specification on page 25 line 26. The claims fail to place the invention squarely within one statutory class of invention. As such, the claim drawn to a form of energy. Energy is not one of the four categories of invention and therefore this claim is not statutory. Energy is not a series of steps or acts and thus is not a process. Energy is not a physical or object and as such is not a machine or manufacture. Energy is not a combination of substances and therefore not a composition of matter.

Claim 39 is a computer-generated user interface claim, **claims 40-69** are apparatus claims, and **claims 70-76** are data structure claims. The claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of

matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*.

Descriptive material can be characterized as either “functional descriptive material” or “nonfunctional descriptive material.” Both types of “descriptive material” are nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)

Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because “[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer.”)

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. **Claims 1, 5-30, 32-37, 39-43, 49-70, 72, 74 and 76** are rejected under 35 U.S.C. 102(b) as being anticipated by Papandreas et al. (CA 2 406 738 A1).

As per **claim 1**, Papandreas et al. discloses “a method of managing referrals from a referrer to a referee, the method comprising:” as the invention provides a information storage, access, and dissemination, and interconnectivity between patients and doctors. Databases housed and managed within a central, controlled environment allow access and manipulation by authorized users via a global computer network. Multiple providers from different locations are able to simultaneously access a patient database for team treatment planning and collaboration (p. 2 lines 16-21).

“in response to a first set of signals received from a referrer computer, causing a database to store information pertaining to a referral from said referrer to said referee, as a collection of linked information units, said information units including a referrer identifier identifying said referrer as originator of said information and a referee identifier identifying said referee as intended recipient of said information, said collection representing said referral and being accessible by said referrer computer and by a referee computer;” as the dentist entry point provides for entry of new patient records,

access to and edit of patient dental records entered by that dentist, and input of new entries into these patient dental records. Through the member dentist entry point, patient records and information may be disseminated to and accessed by other health professionals at the discretion of the dentist who entered the patient information (p. 3 lines 1-6); the patient entry point allows access by a dental patient to view or edit selected portions of his/her own dental record (p. 3 lines 10-11); and access through the various entry points is determined based on the access code entered by a user of the invention. The dentist will provide a patient authorization code to each of his patients for whom the dentist has input a patient dental record into the database. This authorization code will enable the patient to access the patient dental record associated with that patient and to access the other databases available through the patient entry point (p. 3 lines 16-21).

“in response to a second set of signals received from one of said referrer and referee computers, causing collections of information units that satisfy a criterion, to be identified and causing identifications of said collections to be displayed, at said one of said referrer and referee computers,” as the dentist entry point provides for entry of new patient records, access to and edit of patient dental records entered by that dentist, and input of new entries into these patient dental records (p. 3 lines 1-3); and the patient entry point allows access by a dental patient to view or edit selected portions of his/her own dental record (p. 3 lines 10-11).

“in response to a third set of signals received from said one of said referrer and referee computers, causing at least one information unit in a collection corresponding to

a displayed identification, to be displayed at said one of said referrer and referee computers; and" as see Figs 1-7.

"in response to a fourth set of signals received from said one of said referrer and referee computers, causing at least one information unit in said collection corresponding to a displayed identification, to be modified" as each entry or modification into the patient dental record is also provided with a date stamp to reference when the entry or modification was made. The entries into the patient dental record may be sorted and displayed by date. Further, the entries may be provided with a version number, which is discussed in more detail below (p. 9 line 26 to p. 10 line 3); and the patient user will be able to add or modify selected entries in the patient General Chart 310 section, but will only be able to view other information in this section. The dentist who enters the dental record into the database and provides the patient authorization code will initially determine the information accessible and modifiable by the patient user. As additional entries are made into the patient dental record, the author of the entry has the capability to enable the patient user to access or to modify the information. As can be expected, there is a desire for the patient user not to have the capability to modify information relating to, for example, diagnosis and treatment of the patient. However, it is advantageous to allow the patient user to view this information (p.19 lines 7-16).

As per claim 5, Papandreas et al. discloses "the method of claim 1 further comprising (a) facilitating uploading of a file from one of said referrer and referee computers in response to upload signals received therefrom; (b) causing said file to be

stored in association with a collection associated with both said referrer and said referee; and (c) facilitating downloading of said file to one of said referrer and referee computers in response to download signals received therefrom” as the dentist entry point provides for entry of new patient records, access to and edit of patient dental records entered by that dentist, and input of new entries into these patient dental records. Through the member dentist entry point, patient records and information may be disseminated to and accessed by other health professionals at the discretion of the dentist who entered the patient information (p. 3 lines 1-6); the patient entry point allows access by a dental patient to view or edit selected portions of his/her own dental record (p. 3 lines 10-11); and access through the various entry points is determined based on the access code entered by a user of the invention. The dentist will provide a patient authorization code to each of his patients for whom the dentist has input a patient dental record into the database. This authorization code will enable the patient to access the patient dental record associated with that patient and to access the other databases available through the patient entry point (p. 3 lines 16-21).

As per claim 6, Papandreas et al. discloses “the method of claim 1 wherein identifying collections comprises establishing said criterion based on at least one of said referrer identifier and said referee identifier” as access through the various entry points is determined based on the access code entered by a user of the invention. The dentist will provide a patient authorization code to each of his patients for whom the dentist has input a patient dental record into the database. This authorization code will enable the

patient to access the patient dental record associated with that patient and to access the other databases available through the patient entry point (p. 3 lines 16-21).

As per claim 7, Papandreas et al. discloses "the method of claim 6 wherein establishing said criterion comprises causing said criterion to be set to a predefined criterion selected from a set of predefined criteria, in response to a selection signal, in said second set of signals, selecting said predefined criterion, each predefined criterion in said set being based on one of said referrer identifier and said referee identifier" as access through the various entry points is determined based on the access code entered by a user of the invention. The dentist will provide a patient authorization code to each of his patients for whom the dentist has input a patient dental record into the database. This authorization code will enable the patient to access the patient dental record associated with that patient and to access the other databases available through the patient entry point (p. 3 lines 16-21).

As per claim 8, Papandreas et al. discloses "the method of claim 1 wherein identifying collections comprises identifying collections including at least one of said referrer identifier and said referee identifier" as the dentist entry point provides for entry of new patient records, access to and edit of patient dental records entered by that dentist, and input of new entries into these patient dental records. Through the member dentist entry point, patient records and information may be disseminated to and accessed by other health professionals at the discretion of the dentist who entered the

patient information (p. 3 lines 1-6); the patient entry point allows access by a dental patient to view or edit selected portions of his/her own dental record (p. 3 lines 10-11).

As per claim 9, Papandreas et al. discloses "the method of claim 1 wherein causing at least one information unit to be modified comprises causing a modification flag to be set in an information unit associated with said collection corresponding to a displayed identification" as each entry or modification into the patient dental record is also provided with a date stamp to reference when the entry or modification was made. The entries into the patient dental record may be sorted and displayed by date. Further, the entries may be provided with a version number, which is discussed in more detail below (p. 9 line 26 to p. 10 line 3).

As per claim 10, Papandreas et al. discloses "the method of claim 9 wherein causing said modification flag to be set comprises causing a modification flag value to be stored as said modification flag to represent a modification command received in said fourth set of signals" as each entry or modification into the patient dental record is also provided with a date stamp to reference when the entry or modification was made. The entries into the patient dental record may be sorted and displayed by date. Further, the entries may be provided with a version number, which is discussed in more detail below (p. 9 line 26 to p. 10 line 3).

As per **claim 11**, Papandreas et al. discloses "the method of claim 9 further comprising, if said collection corresponding to a displayed identification is caused to be displayed at one of said referrer and referee computers, causing said modification flag to be reset" as each entry or modification into the patient dental record is also provided with a date stamp to reference when the entry or modification was made. The entries into the patient dental record may be sorted and displayed by date. Further, the entries may be provided with a version number, which is discussed in more detail below (p. 9 line 26 to p. 10 line 3).

As per **claim 12**, Papandreas et al. discloses "the method of claim 9 wherein identifying collections comprises identifying collections having a modification flag satisfying a modification criterion so that identifications corresponding to collections having information units that have been modified in accordance with said modification criterion, are displayed" as the dentist entry point provides for entry of new patient records, access to and edit of patient dental records entered by that dentist, and input of new entries into these patient dental records. Through the member dentist entry point, patient records and information may be disseminated to and accessed by other health professionals at the discretion of the dentist who entered the patient information (p. 3 lines 1-6); the patient entry point allows access by a dental patient to view or edit selected portions of his/her own dental record (p. 3 lines 10-11).

As per **claim 13**, Papandreas et al. discloses "the method of claim 9 further comprising causing to be presented, a representation of said modification flag, at at least one of said referrer and said referee computers" as each entry or modification into the patient dental record is also provided with a date stamp to reference when the entry or modification was made. The entries into the patient dental record may be sorted and displayed by date. Further, the entries may be provided with a version number, which is discussed in more detail below (p. 9 line 26 to p. 10 line 3).

As per **claim 14**, Papandreas et al. discloses "the method of claim 1 wherein causing identifications to be displayed comprises listing labels respectively associated with said collections to be shown in a display image" as see Figs. 2 and 7.

As per **claim 15**, Papandreas et al. discloses "the method of claim 14 wherein causing identifications to be displayed comprises using different display parameters for different labels to distinguish at least one label from another" as see Figs. 2 and 7.

As per **claim 16**, Papandreas et al. discloses "the method of claim 15 further comprising causing a set of display parameters associated with a selection criterion to be associated with labels of collections that satisfy said selection criterion" as see Figs. 2 and 7.

As per **claim 17**, Papandreas et al. discloses "the method of claim 1 wherein causing information to be stored comprises causing information including at least one of a client name or identifier, a client date of birth, a need, an urgency status associated with said need, a referrer name, and a referee name to be stored" as in the Patient Scheduling 111 area, the dentist may input, view, confirm, or modify daily appointments by patients. The dentist may also e-mail reminders to patients regarding upcoming appointments, respond to e-mails from patients with appointment requests, and automatically or manually e-mail notifications of needed appointments to patients. The information in this area may be viewed in a variety of ways, including by day, by week, by patient, and by name. This allows the dentist to actively and effectively manage his appointment calendar (p. 8 lines 6-13).

As per **claim 18**, Papandreas et al. discloses "the method of claim 1 wherein causing information to be stored causing a class identifier classifying said referral into a pre-defined classification to be produced, in response to said first set of signals, and causing said class identifier to be stored in an information unit associated with said collection" as in the Referral Slip/Extraction Slip are 116, the dentist may enter information regarding other medical or dental professionals to whom the dentist is referring the patient for additional evaluation, diagnosis, or treatment. This area may be used to make referrals via the global computer network with e-mail notifications to the patient and the relevant doctors of referral. An entry into the History 113 area may be automatically made when an entry is made into the Referral 116 area (p. 10 lines 9-15).

As per **claim 19**, Papandreas et al. discloses "the method of claim 18 further comprising causing at least one question to be presented to an operator of said referrer computer, receiving a response to said at least one question, and causing said class identifier to be produced in response to said response to said at least one question" as in the Diagnosis and Treatment Guide 117 area, the dentist may engage an interactive diagnosis and treatment guide to identify potential diagnoses and treatments that a dentist may wish to consider that correlate to the symptoms of a patient. The dentist enters answers to a series of questions relating to observations, visual signs, or symptoms (collectively "symptoms"). The symptoms may be those actually observed by or related to the dentist, or those obtained from the record data. As with the case of record entry, as discussed above, the answers or questions may be displayed and input via graphical or tabular representations, such as a dental and periodontal examination chart (p. 10 lines 16-24).

As per **claim 20**, Papandreas et al. discloses "the method of claim 18 wherein causing collections to be identified includes causing collections that have class identifiers satisfying a criterion to be identified" as in the Diagnosis and Treatment Guide 117 area, the dentist may engage an interactive diagnosis and treatment guide to identify potential diagnoses and treatments that a dentist may wish to consider that correlate to the symptoms of a patient. The dentist enters answers to a series of questions relating to observations, visual signs, or symptoms (collectively "symptoms").

The symptoms may be those actually observed by or related to the dentist, or those obtained from the record data. As with the case of record entry, as discussed above, the answers or questions may be displayed and input via graphical or tabular representations, such as a dental and periodontal examination chart (p. 10 lines 16-24).

As per **claim 21**, Papandreas et al. discloses "the method of claim 1 further comprising causing at least one question to be presented to an operator of said referrer computer and receiving a response to said at least one question" as in the Diagnosis and Treatment Guide 117 area, the dentist may engage an interactive diagnosis and treatment guide to identify potential diagnoses and treatments that a dentist may wish to consider that correlate to the symptoms of a patient. The dentist enters answers to a series of questions relating to observations, visual signs, or symptoms (collectively "symptoms"). The symptoms may be those actually observed by or related to the dentist, or those obtained from the record data. As with the case of record entry, as discussed above, the answers or questions may be displayed and input via graphical or tabular representations, such as a dental and periodontal examination chart (p. 10 lines 16-24).

As per **claim 22**, Papandreas et al. discloses "the method of claim 21 further comprising causing said response to said at least one question to be stored in information units associated with said collection" as in the Diagnosis and Treatment Guide 117 area, the dentist may engage an interactive diagnosis and treatment guide to

identify potential diagnoses and treatments that a dentist may wish to consider that correlate to the symptoms of a patient. The dentist enters answers to a series of questions relating to observations, visual signs, or symptoms (collectively "symptoms"). The symptoms may be those actually observed by or related to the dentist, or those obtained from the record data. As with the case of record entry, as discussed above, the answers or questions may be displayed and input via graphical or tabular representations, such as a dental and periodontal examination chart (p. 10 lines 16-24).

As per claim 23, Papandreas et al. discloses "the method of claim 21 further comprising causing a notification to be transmitted to said referrer computer when said response to said at least one question does not satisfy a validation criterion" as in the Diagnosis and Treatment Guide 117 area, the dentist may engage an interactive diagnosis and treatment guide to identify potential diagnoses and treatments that a dentist may wish to consider that correlate to the symptoms of a patient. The dentist enters answers to a series of questions relating to observations, visual signs, or symptoms (collectively "symptoms"). The symptoms may be those actually observed by or related to the dentist, or those obtained from the record data. As with the case of record entry, as discussed above, the answers or questions may be displayed and input via graphical or tabular representations, such as a dental and periodontal examination chart (p. 10 lines 16-24).

As per **claim 24**, Papandreas et al. discloses "the method of claim 1 wherein causing identifications to be displayed comprises causing identifications to be displayed in an order dependent upon at least one information unit in each collection" as in order to effectively coordinate the treatments and maintain the regimental sequencing of procedures, interaction and communication between team members is essential To effect this interaction and communication, each patient under treatment by an IDT team will have IDT-related information available to team members in the IDT Specific Charts/Records 119 and IDT *Workflow/Application* 120 areas of the Patient 110 area. The specific information available in these areas will depend upon the particular circumstance for the patient in question, but will ordinarily conform with the general provisions of IDT team treatment as established by The Academy of Interdisciplinary Dentofacial Therapy (p. 15 lines 1-10).

As per **claim 25**, Papandreas et al. discloses "the method of claim 1 further comprising causing an event log to be associated with said collection and adding an entry to be added to said event log in response to occurrence of an event involving modification of at least one information unit of said collection in response to said fourth set of signals" as periodically, the record, or selected entries or portions thereof, may also be archived to a remote location by any method practicable, such as tape backup storage, removable electronic disk storage, etc. This will provide additional storage space for new records or new entries, while preserving the history of the existing records (p. 13 lines 20-24).

As per claim 26, Papandreas et al. discloses “the method of claim 25 wherein causing an entry to be added said event log comprises causing a chronological order indicator to be associated with an identification of said event” as preferably, each time an entry is made to a record, selected previous entries to the record are copied and stored separate from the active database as a permanent backup record. Preferably, the selected previous entries include diagnostic and treatment entries. The backup record or the new entry or both are provided with a sequential version number which identifies the number of times a record is backed up or new entries are made the record. This enables a dentist, for example, to identify if there are new entries to be reviewed based on the version number of the record in the active database, provides for storage of a permanent backup copy of the record for security purposes, and may aid in the coordination of treatment with other dental professionals. A dentist may also request that a hard copy of the active record, backup record, or portions thereof be printed and provided for physical storage (p. 13 lines 8-19).

As per claim 27, Papandreas et al. discloses “the method of claim 26 wherein said identification of said event includes an identification of said referrer or referee computer from which said fourth set of signals were received” as preferably, each time an entry is made to a record, selected previous entries to the record are copied and stored separate from the active database as a permanent backup record. Preferably, the selected previous entries include diagnostic and treatment entries. The backup

record or the new entry or both are provided with a sequential version number which identifies the number of times a record is backed up or new entries are made the record. This enables a dentist, for example, to identify if there are new entries to be reviewed based on the version number of the record in the active database, provides for storage of a permanent backup copy of the record for security purposes, and may aid in the coordination of treatment with other dental professionals. A dentist may also request that a hard copy of the active record, backup record, or portions thereof be printed and provided for physical storage. Periodically, the record, or selected entries or portions thereof, may also be archived to a remote location by any method practicable, such as tape backup storage, removable electronic disk storage, etc. This will provide additional storage space for new records or new entries, while preserving the history of the existing records (p. 13 lines 8-24).

As per claim 28, Papandreas et al. discloses "the method of claim 25 further comprising facilitating viewing of said event log from at least one of said referrer and said referee computers" as preferably, each time an entry is made to a record, selected previous entries to the record are copied and stored separate from the active database as a permanent backup record. Preferably, the selected previous entries include diagnostic and treatment entries. The backup record or the new entry or both are provided with a sequential version number which identifies the number of times a record is backed up or new entries are made the record. This enables a dentist, for example, to identify if there are new entries to be reviewed based on the version number of the

record in the active database, provides for storage of a permanent backup copy of the record for security purposes, and may aid in the coordination of treatment with other dental professionals. A dentist may also request that a hard copy of the active record, backup record, or portions thereof be printed and provided for physical storage. Periodically, the record, or selected entries or portions thereof, may also be archived to a remote location by any method practicable, such as tape backup storage, removable electronic disk storage, etc. This will provide additional storage space for new records or new entries, while preserving the history of the existing records (p. 13 lines 8-24).

As per claim 29, Papandreas et al. discloses "the method of claim 1 further comprising, in response to receiving said fourth set of signals from said one of said referrer and referee computers, causing a message to be sent to the other of said one of said referrer and said referee computers" as the Patient 110 section also enables the dentist to communicate with the patient. This may be effected via the patient's e-mail address, by an area established within the patient 110 section for leaving messages for the patient in a field associated with the patient dental record, or any other suitable method. Likewise, the patient may also communicate with the dentist in a like reciprocal manner (p. 12 lines 10-15).

As per claim 30, Papandreas et al. discloses "the method of claim 1 further comprising causing information units and computer readable codes to be transmitted from said database, to one of said referrer and referee computers, said computer-

readable codes being operable to cause a processor circuit at said one of said referrer and referee computers, (i) to cause at least some of the transmitted information to be displayed at said one of said referrer and referee computers; and (ii) to facilitate generation, in response to user input at said one of said referrer and referee computers, of communication signals for transmission from said one of said referrer and referee computers, said communication signals including at least one of said first, second, third and fourth sets of signals" as in the Prescriptions 115 area, the dentist may enter information regarding medications prescribed to the patient. This area may also be used for actual entry of prescriptions for electronic transmittal to an approved pharmacy. An entry into the History 113 area may be automatically made when an entry is made into the Prescriptions 115 area (p. 10 lines 4-8).

As per claim 32, Papandreas et al. discloses "the method of claim 1 wherein said third set of signals includes a selection signal indicating selection of said collection corresponding to a displayed indication" as see Figs. 2 and 7; and once an entry is made into the General Exams 114 area, such an entry may be made permanent and unable to be altered. This will ensure that diagnosis and treatment information is not subsequently altered or deleted, such that a record of the history of diagnoses and treatment of the patient is incomplete. As discussed, below, a backup record of selected entries to a patient dental record may also be generated to ensure permanence of record entries (p. 9 lines 17-22).

As per claim 33, Papandreas et al. discloses "the method of claim 1 wherein said third and fourth sets of signals are the same" as see Figs. 2 and 7; and once an entry is made into the General Exams 114 area, such an entry may be made permanent and unable to be altered. This will ensure that diagnosis and treatment information is not subsequently altered or deleted, such that a record of the history of diagnoses and treatment of the patient is incomplete. As discussed, below, a backup record of selected entries to a patient dental record may also be generated to ensure permanence of record entries (p. 9 lines 17-22).

As per claim 34, Papandreas et al. discloses "the method of claim 1 wherein causing at least one information unit in said collection corresponding to a displayed indication to be modified comprises limiting which information units may be modified according to whether said fourth set of signals are received from said referrer computer or said referee computer" as once a patient dental record, or entries within a patient dental record, is identified as matching the input text, this patient dental record may be retrieved, edited, or new entries made, as discussed below. After completion of the access to the patient dental record, the record is again stored into the database in its modified form. Preferably, each time an entry is made to a record, selected previous entries to the record are copied and stored separate from the active database as a permanent backup record. Preferably, the selected previous entries include diagnostic and treatment entries. The backup record or the new entry or both are provided with a sequential version number which identifies the number of times a record is backed up or

new entries are made the record. This enables a dentist, for example, to identify if there are new entries to be reviewed based on the version number of the record in the active database, provides for storage of a permanent backup copy of the record for security purposes, and may aid in the coordination of treatment with other dental professionals (p. 13 lines 3-17).

As per claim 35, Papandreas et al. discloses "the method of claim 1 further comprising causing a computer to be identified as being associated with said referrer or said referee, in response to a respective referrer or referee key associated with said referrer or referee respectively, received from said computer" as once a patient dental record, or entries within a patient dental record, is identified as matching the input text, this patient dental record may be retrieved, edited, or new entries made, as discussed below. After completion of the access to the patient dental record, the record is again stored into the database in its modified form. Preferably, each time an entry is made to a record, selected previous entries to the record are copied and stored separate from the active database as a permanent backup record. Preferably, the selected previous entries include diagnostic and treatment entries. The backup record or the new entry or both are provided with a sequential version number which identifies the number of times a record is backed up or new entries are made the record. This enables a dentist, for example, to identify if there are new entries to be reviewed based on the version number of the record in the active database, provides for storage of a permanent

backup copy of the record for security purposes, and may aid in the coordination of treatment with other dental professionals (p. 13 lines 3-17).

As per claim 36, Papandreas et al. discloses "the method of claim 1 further comprising linking said identifications with a display interface operable to cause information units in a corresponding collection to be displayed" as each entry or modification into the patient dental record is also provided with a date stamp to reference when the entry or modification was made. The entries into the patient dental record may be sorted and displayed by date. Further, the entries may be provided with a version number, which is discussed in more detail below (p. 9 line 26 to p. 10 line 3).

As per claim 37, Papandreas et al. discloses "a signal encoded with computer-readable codes for directing a processor circuit to perform the method recited in claim 1" as the Patient 110 section also enables the dentist to communicate with the patient. This may be effected via the patient's e-mail address, by an area established within the patient 110 section for leaving messages for the patient in a field associated with the patient dental record, or any other suitable method. Likewise, the patient may also communicate with the dentist in a like reciprocal manner (p. 12 lines 10-15).

As per claim 39, Papandreas et al. discloses "a computer-generated user interface soliciting responses from a user that are provided to a computer having a memory with computer-executable codes operable to cause said computer to perform

the method of claim 1, in response to said responses" as an entry into the History 113 area may be automatically made when an entry is made into the patient dental record though the General Exams 114 area. Each entry or modification into the patient dental record is also provided with a date stamp to reference when the entry or modification was made. The entries into the patient dental record may be sorted and displayed by date (p. 9 line 23 to p. 10 line 2).

As per claim 40, Papandreas et al. discloses "an apparatus to facilitate management of referrals from a referrer to a referee, the apparatus comprising:"

"storing means, responsive to a first set of signals received from a referrer computer, for storing, in a database, information pertaining to a referral from said referrer to said referee, said information being stored as a collection of linked information units, said information units including a referrer identifier identifying said referrer as originator of said information and a referee identifier identifying said referee as intended recipient of said information, said collection representing said referral and being accessible by said referrer computer and a referee computer;" as the invention provides a information storage, access, and dissemination, and interconnectivity between patients and doctors. Databases housed and managed within a central, controlled environment allow access and manipulation by authorized users via a global computer network. Multiple providers from different locations are able to simultaneously access a patient database for team treatment planning and collaboration (p. 2 lines 16-21); the dentist entry point provides for entry of new patient records, access to and edit

of patient dental records entered by that dentist, and input of new entries into these patient dental records. Through the member dentist entry point, patient records and information may be disseminated to and accessed by other health professionals at the discretion of the dentist who entered the patient information (p. 3 lines 1-6); the patient entry point allows access by a dental patient to view or edit selected portions of his/her own dental record (p. 3 lines 10-11); and access through the various entry points is determined based on the access code entered by a user of the invention. The dentist will provide a patient authorization code to each of his patients for whom the dentist has input a patient dental record into the database. This authorization code will enable the patient to access the patient dental record associated with that patient and to access the other databases available through the patient entry point (p. 3 lines 16-21).

"collection identification means, responsive to a second set of signals received from one of said referrer and referee computers, for identifying, in said database, collections of information units that satisfy a criterion, and for causing identifications to be displayed at said one of said referrer and referee computers, said identifications corresponding to respective collections of information units satisfying said criterion;" as Figure 2 illustrates the architecture of the patient 110 section of the preferred embodiment. Once the dentist has entered the patient 110 section, he or she may access any of the following areas: Patient Scheduling 111, Patients General Charts 112, Medical/Dental History Charts 113, General Exams 114, Prescriptions 115, Referral Slip/Extraction Slip 116, Diagnosis and Treatment Guide 117, Lab Request and Tracking 118, IDT Specific Charts and Records 119, IDT Workflow/Application 120, and

E-Statements for Billing 121 (p. 7 line 19 to p. 8 line 5); and Figure 7 illustrates the architecture of the patient entry point 300. Upon entry to the patient entry point 300, the patient user is prompted and required to enter a predetermined patient authorization code or patient password. The predetermined patient authorization code is provided by the dentist who has entered the dental record associated with that patient into the dental record database, as is discussed in more detail below. Upon the first entry of the patient authorization code, the patient may be directed to an on-line medical information release authorization to authorize the member dentist to maintain digital dental records (p. 18 lines 8-16).

"information display means, responsive to a third set of signals received from said one of said referrer and referee computers, for causing at least one information unit in a collection corresponding to a displayed identification, to be displayed at said one of said referrer and referee computers; and" as see Figs 1-7.

"information modification means, responsive to a fourth set of signals received from said one of said referrer and referee computers, for causing at least one information unit in said collection corresponding to a displayed identification, to be modified" as each entry or modification into the patient dental record is also provided with a date stamp to reference when the entry or modification was made. The entries into the patient dental record may be sorted and displayed by date. Further, the entries may be provided with a version number, which is discussed in more detail below (p. 9 line 26 to p. 10 line 3); and the patient user will be able to add or modify selected entries in the patient General Chart 310 section, but will only be able to view other information

in this section. The dentist who enters the dental record into the database and provides the patient authorization code will initially determine the information accessible and modifiable by the patient user. As additional entries are made into the patient dental record, the author of the entry has the capability to enable the patient user to access or to modify the information. As can be expected, there is a desire for the patient user not to have the capability to modify information relating to, for example, diagnosis and treatment of the patient. However, it is advantageous to allow the patient user to view this information (p.19 lines 7-16).

As per claim 41, Papandreas et al. discloses "an apparatus to facilitate management of referrals from a referrer to a referee, the apparatus comprising:"

"a database interface operable to control a database, said database interface being operable to cause the database to store information from a referrer computer, said information pertaining to a referral from said referrer to said referee, said information being stored as a collection of linked information units, said information units including a referrer identifier identifying said referrer computer as originator of said information and a referee identifier identifying a referee computer as intended recipient of said information, said collection representing said referral;" as the invention provides a information storage, access, and dissemination, and interconnectivity between patients and doctors (p. 2 lines 16-17).

"a filter operable to cause said database interface to identify, in said database, collections of information units that satisfy a criterion, and" as databases housed and

managed within a central, controlled environment allow access and manipulation by authorized users via a global computer network. Multiple providers from different locations are able to simultaneously access a patient database for team treatment planning and collaboration (p. 2 lines 18-21) "to cause identifications to be displayed at one of said referrer and referee computers, said identifications corresponding to respective collections of information units satisfying said criterion; and" as the dentist entry point provides for entry of new patient records, access to and edit of patient dental records entered by that dentist, and input of new entries into these patient dental records. Through the member dentist entry point, patient records and information may be disseminated to and accessed by other health professionals at the discretion of the dentist who entered the patient information (p. 3 lines 1-6); Fig. 7 and the patient entry point allows access by a dental patient to view or edit selected portions of his/her own dental record (p. 3 lines 10-11).

" a client interface cooperating with said database interface and filter and operable to communicate with and be controlled from said referrer and referee computers, said client interface comprising:"

"a referral creation facility operable to facilitate causing said database interface to store said information as said collection in response to signals received from said referrer computer;" as see Fig. 7; and the patient entry point allows access by a dental patient to view or edit selected portions of his/her own dental record (p. 3 lines 10-11); and access through the various entry points is determined based on the access code entered by a user of the invention. The

dentist will provide a patient authorization code to each of his patients for whom the dentist has input a patient dental record into the database. This authorization code will enable the patient to access the patient dental record associated with that patient and to access the other databases available through the patient entry point (p. 3 lines 16-21).

"an information display facility operable to facilitating viewing, from said one of said referrer and referee computers, of at least one information unit in a collection identified by said filter; and" as see Figs 1-7.

"an information modification facility operable to facilitate causing a modification, from said one of said referrer and referee computers, of at least one information unit in a collection identified by said filter; wherein said filter is operable to identify said collection when said collection satisfies said criterion and to cause an identification corresponding to said collection to be displayed at said one of said referrer and referee computers" as each entry or modification into the patient dental record is also provided with a date stamp to reference when the entry or modification was made. The entries into the patient dental record may be sorted and displayed by date. Further, the entries may be provided with a version number, which is discussed in more detail below (p. 9 line 26 to p. 10 line 3); and the patient user will be able to add or modify selected entries in the patient General Chart 310 section, but will only be able to view other information in this section. The dentist who enters the dental record into the database and provides the patient authorization code will initially determine the

information accessible and modifiable by the patient user. As additional entries are made into the patient dental record, the author of the entry has the capability to enable the patient user to access or to modify the information. As can be expected, there is a desire for the patient user not to have the capability to modify information relating to, for example, diagnosis and treatment of the patient. However, it is advantageous to allow the patient user to view this information (p.19 lines 7-16).

As per **claim 42**, Papandreas et al. discloses "the apparatus of claim 41 wherein said database interface, said filter and said client interface are implemented by a processor circuit" as a computer database having one or more patient records, each record of which has one or more fields, is created and is accessible via the global computer network for viewing and editing by entry of the appropriate authorization code by a user. The present invention provides a portal for both healthcare consumer and professional. The invention provides information storage, access, and dissemination, and interconnectivity between patients and doctors (p. 2 lines 11-17).

As per **claim 43**, Papandreas et al. discloses "the apparatus of claim 42 wherein said processor circuit includes a processor and memory in communication with said processor, said memory being encoded with codes for directing said processor to effect said database interface, said filter and said client interface" as the present invention provides a method for medical professionals to manage patient records by remote

access via a global computer network. A database of patient records is maintained, housed, and managed within a central, controlled environment remote from the location of the medical professional. Remote access to the records is provided by entry of a unique authorization code via the global computer network (p. 5 lines 20-25).

As per claim 49, Papandreas et al. discloses "the apparatus of claim 41 wherein said client interface is further operable to cooperate with said database interface to: (a) facilitate uploading a file, into said database, from one of said referrer and referee computers in response to upload signals received therefrom; and (b) facilitate downloading said file, from said database, to one of said referrer and referee computers in response to download signals received therefrom" as the dentist entry point provides for entry of new patient records, access to and edit of patient dental records entered by that dentist, and input of new entries into these patient dental records. Through the member dentist entry point, patient records and information may be disseminated to and accessed by other health professionals at the discretion of the dentist who entered the patient information (p. 3 lines 1-6); the patient entry point allows access by a dental patient to view or edit selected portions of his/her own dental record (p. 3 lines 10-11); and access through the various entry points is determined based on the access code entered by a user of the invention. The dentist will provide a patient authorization code to each of his patients for whom the dentist has input a patient dental record into the database. This authorization code will enable the patient to access the patient dental

record associated with that patient and to access the other databases available through the patient entry point (p. 3 lines 16-21).

As per claim 50, Papandreas et al. discloses "the apparatus of claim 43 wherein said codes include codes for directing said processor to cause said database to store a modification flag in an information unit of said collection and to cause said database to set said modification flag to a first value to indicate that the collection has not yet been modified" as each entry or modification into the patient dental record is also provided with a date stamp to reference when the entry or modification was made. The entries into the patient dental record may be sorted and displayed by date. Further, the entries may be provided with a version number, which is discussed in more detail below (p. 9 line 26 to p. 10 line 3).

As per claim 51, Papandreas et al. discloses "the apparatus of claim 50, wherein said codes include: codes for directing said processor to cause said database to cause said modification flag to be set to a second value when said information modification facility is controlled, from said one of said referrer and referee computers, to cause a modification to said collection identified by said filter; and codes for directing said processor to cause the database to cause modification flag to be set a third value when said information display facility is controlled, from the other of said referrer and referee computers, to cause display of said collection identified by said filter" as each entry or modification into the patient dental record is also provided with a date stamp to

reference when the entry or modification was made. The entries into the patient dental record may be sorted and displayed by date. Further, the entries may be provided with a version number, which is discussed in more detail below (p. 9 line 26 to p. 10 line 3).

As per claim 52, Papandreas et al. discloses "the apparatus of claim 50 wherein said codes include codes for directing said processor to cause the database to store a value in said modification flag, said value representing a modification command received by said information modification facility from said one of said referrer and referee computers" as each entry or modification into the patient dental record is also provided with a date stamp to reference when the entry or modification was made. The entries into the patient dental record may be sorted and displayed by date. Further, the entries may be provided with a version number, which is discussed in more detail below (p. 9 line 26 to p. 10 line 3).

As per claim 53, Papandreas et al. discloses "the apparatus of claim 52 wherein said codes comprise codes for directing said processor to cause the database to identify collections having a modification flag satisfying a modification criterion so that identifications corresponding to collections having information units that have been modified in accordance with said modification criterion, are displayed" as each entry or modification into the patient dental record is also provided with a date stamp to reference when the entry or modification was made. The entries into the patient dental

record may be sorted and displayed by date. Further, the entries may be provided with a version number, which is discussed in more detail below (p. 9 line 26 to p. 10 line 3).

As per claim 54, Papandreas et al. discloses "the apparatus of claim 52 wherein said codes include codes for directing said processor to cause a representation of said modification flag to be presented at at least one of said referrer and said referee computers" as each entry or modification into the patient dental record is also provided with a date stamp to reference when the entry or modification was made. The entries into the patient dental record may be sorted and displayed by date. Further, the entries may be provided with a version number, which is discussed in more detail below (p. 9 line 26 to p. 10 line 3).

As per claim 55, Papandreas et al. discloses "the apparatus of claim 41 wherein said information display facility cooperates with said filter to cause labels respectively associated with said collections satisfying said criterion to be displayed at said one of said referrer and referee computers using a first set of display parameters" as see Figs. 2 and 7.

As per claim 56, Papandreas et al. discloses "the apparatus of claim 55 wherein said information display facility cooperates with said filter to cause labels associated with collections satisfying an additional selection criterion to be displayed at said one of said referrer and referee computers using a second set of display parameters in order to

distinguish labels associated with collections which satisfy said additional selection criterion from labels associated with collections that do not" as see Figs. 2 and 7.

As per claim 57, Papandreas et al. discloses "the apparatus of claim 41 wherein said collection includes at least one of a client name or identifier, a client date of birth, a need, an urgency status associated with said need, a referrer name, and a referee name" as in the Patient Scheduling 111 area, the dentist may input, view, confirm, or modify daily appointments by patients. The dentist may also e-mail reminders to patients regarding upcoming appointments, respond to e-mails from patients with appointment requests, and automatically or manually e-mail notifications of needed appointments to patients. The information in this area may be viewed in a variety of ways, including by day, by week, by patient, and by name. This allows the dentist to actively and effectively manage his appointment calendar (p. 8 lines 6-13).

As per claim 58, Papandreas et al. discloses "the apparatus of claim 41 wherein said referral creation facility is operable to produce a class identifier classifying said referral into a pre-defined classification in response to receiving said information, said referral creation facility being operable to cause said database interface to store said class identifier in information units associated with said collection" as in the Referral Slip/Extraction Slip are 116, the dentist may enter information regarding other medical or dental professionals to whom the dentist is referring the patient for additional evaluation, diagnosis, or treatment. This area may be used to make referrals via the

global computer network with e-mail notifications to the patient and the relevant doctors of referral. An entry into the History 113 area may be automatically made when an entry is made into the Referral 116 area (p. 10 lines 9-15).

As per **claim 59**, Papandreas et al. discloses "the apparatus of claim 41 wherein said client interface is operable to cause at least one question to be presented to an operator of said referrer computer, to receive a response to said at least one question, and to cause said database interface to store said response" as in the Diagnosis and Treatment Guide 117 area, the dentist may engage an interactive diagnosis and treatment guide to identify potential diagnoses and treatments that a dentist may wish to consider that correlate to the symptoms of a patient. The dentist enters answers to a series of questions relating to observations, visual signs, or symptoms (collectively "symptoms"). The symptoms may be those actually observed by or related to the dentist, or those obtained from the record data. As with the case of record entry, as discussed above, the answers or questions may be displayed and input via graphical or tabular representations, such as a dental and periodontal examination chart (p. 10 lines 16-24).

As per **claim 60**, Papandreas et al. discloses "the apparatus of claim 55 wherein said client interface is operable to cause a notification to be transmitted to said referrer computer when said response to said at least one question does not satisfy a validation criterion" as in the Diagnosis and Treatment Guide 117 area, the dentist may engage an

interactive diagnosis and treatment guide to identify potential diagnoses and treatments that a dentist may wish to consider that correlate to the symptoms of a patient. The dentist enters answers to a series of questions relating to observations, visual signs, or symptoms (collectively "symptoms"). The symptoms may be those actually observed by or related to the dentist, or those obtained from the record data. As with the case of record entry, as discussed above, the answers or questions may be displayed and input via graphical or tabular representations, such as a dental and periodontal examination chart (p. 10 lines 16-24).

As per claim 61, Papandreas et al. discloses "the apparatus of claim 41 wherein said filter causes identifications to be displayed in an order dependent upon at least one information unit in each collection corresponding to a displayed identification" as in order to effectively coordinate the treatments and maintain the regimental sequencing of procedures, interaction and communication between team members is essential To effect this interaction and communication, each patient under treatment by an IDT team will have IDT-related information available to team members in the IDT Specific Charts/Records 119 and IDT *Workflow/Application* 120 areas of the Patient 110 area. The specific information available in these areas will depend upon the particular circumstance for the patient in question, but will ordinarily conform with the general provisions of IDT team treatment as established by The Academy of Interdisciplinary Dentofacial Therapy (p. 15 lines 1-10).

As per claim 62, Papandreas et al. discloses "the apparatus of claim 41 wherein said database interface is operable to cause the database to maintain an event log for each collection and wherein said client interface is operable to cause said database interface to update said event log to cause an entry to be added to said event log in response to occurrence of an event involving said information modification facility being controlled from one of said referrer and referee computers to cause a modification to at least one information unit of said collection, wherein said entry includes at least one of a chronological order indicator, an identification of said event, and an identification of said one of said referrer and referee computers from which said modification was caused" as preferably, each time an entry is made to a record, selected previous entries to the record are copied and stored separate from the active database as a permanent backup record. Preferably, the selected previous entries include diagnostic and treatment entries. The backup record or the new entry or both are provided with a sequential version number which identifies the number of times a record is backed up or new entries are made the record. This enables a dentist, for example, to identify if there are new entries to be reviewed based on the version number of the record in the active database, provides for storage of a permanent backup copy of the record for security purposes, and may aid in the coordination of treatment with other dental professionals. A dentist may also request that a hard copy of the active record, backup record, or portions thereof be printed and provided for physical storage. Periodically, the record, or selected entries or portions thereof, may also be archived to a remote location by any method practicable, such as tape backup storage, removable electronic disk storage,

etc. This will provide additional storage space for new records or new entries, while preserving the history of the existing records (p. 13 lines 8-24).

As per claim 63, Papandreas et al. discloses "the apparatus of claim 62 wherein said information display facility is operable to be controlled from said one of said referrer and referee computers to cause display of said event log thereat" as preferably, each time an entry is made to a record, selected previous entries to the record are copied and stored separate from the active database as a permanent backup record. Preferably, the selected previous entries include diagnostic and treatment entries. The backup record or the new entry or both are provided with a sequential version number which identifies the number of times a record is backed up or new entries are made the record. This enables a dentist, for example, to identify if there are new entries to be reviewed based on the version number of the record in the active database, provides for storage of a permanent backup copy of the record for security purposes, and may aid in the coordination of treatment with other dental professionals. A dentist may also request that a hard copy of the active record, backup record, or portions thereof be printed and provided for physical storage. Periodically, the record, or selected entries or portions thereof, may also be archived to a remote location by any method practicable, such as tape backup storage, removable electronic disk storage, etc. This will provide additional storage space for new records or new entries, while preserving the history of the existing records (p. 13 lines 8-24).

As per claim 64, Papandreas et al. discloses "the apparatus of claim 52 wherein said information modification facility responds to receiving said modification command from one of said referrer and referee computers by facilitating sending a message therefrom to the other of said referrer and referee computers" as the Patient 110 section also enables the dentist to communicate with the patient. This may be effected via the patient's e-mail address, by an area established within the patient 110 section for leaving messages for the patient in a field associated with the patient dental record, or any other suitable method. Likewise, the patient may also communicate with the dentist in a like reciprocal manner (p. 12 lines 10-15).

As per claim 65, Papandreas et al. discloses "the apparatus of claim 41 wherein said client interface is operable to cause information units from said database and computer-readable codes, to be transmitted to one of said referrer and referee computers, said computer-readable codes being operable to cause a processor circuit at said one of said referrer and referee computers, (i) to cause at least some of said transmitted information to be displayed at said one of said referrer and referee computers; and (ii) to facilitate generation, in response to user input at said one of said referrer and referee computers, of communication signals for transmission from said one of said referrer and referee computers to said client interface" as in the Prescriptions 115 area, the dentist may enter information regarding medications prescribed to the patient. This area may also be used for actual entry of prescriptions for electronic transmittal to an approved pharmacy. An entry into the History 113 area may

be automatically made when an entry is made into the Prescriptions 115 area (p. 10 lines 4-8).

As per claim 66, Papandreas et al. discloses "the apparatus of claim 41 wherein said client interface is operable to receive, from said one of said referrer and referee computers, a selection signal indicating selection of said collection identified by said filter, and to cause said information display facility to cause an information unit of said collection identified by said filter to be displayed at said one of said referrer and referee computers in response thereto" as see Figs. 2 and 7; and once an entry is made into the General Exams 114 area, such an entry may be made permanent and unable to be altered. This will ensure that diagnosis and treatment information is not subsequently altered or deleted, such that a record of the history of diagnoses and treatment of the patient is incomplete. As discussed, below, a backup record of selected entries to a patient dental record may also be generated to ensure permanence of record entries (p. 9 lines 17-22).

As per claim 67, Papandreas et al. discloses "the apparatus of claim 41 wherein said client interface further comprises an authentication facility operable to identify a computer from which signals are received as being associated with a user, in response to receiving from said computer a user key associated with a user identifier identifying said user" as in the other areas and sections, access to the various areas in this section may be controlled via the authorization code provided to the user or by the author of the

information in each area. Figure 7 illustrates the architecture of the patient entry point 300. Upon entry to the patient entry point 300, the patient user is prompted and required to enter a predetermined patient authorization code or patient password. The predetermined patient authorization code is provided by the dentist who has entered the dental record associated with that patient into the dental record database, as is discussed in more detail below. Upon the first entry of the patient authorization code, the patient may be directed to an on-line medical information release authorization to authorize the member dentist to maintain digital dental records. After this initial authorization, the patient user is directed to the home page (not shown) of the dentist who provided the patient authorization code to the patient user (p. 18 lines 5-19).

As per claim 68, Papandreas et al. discloses "the apparatus of claim 67 wherein said client interface is further operable to establish said criterion based on said user identifier" as access through the various entry points is determined based on the access code entered by a user of the invention. The dentist will provide a patient authorization code to each of his patients for whom the dentist has input a patient dental record into the database. This authorization code will enable the patient to access the patient dental record associated with that patient and to access the other databases available through the patient entry point (p. 3 lines 16-21).

As per claim 69, Papandreas et al. discloses "the apparatus of claim 41 wherein said client interface is further operable to cause said filter to use, as said criterion, a

predefined criterion selected from a set of predefined criteria, in response to a selection signal received from said computer, indicating said predefined criterion" as Figure 7 illustrates the architecture of the patient entry point 300. Upon entry to the patient entry point 300, the patient user is prompted and required to enter a predetermined patient authorization code or patient password. The predetermined patient authorization code is provided by the dentist who has entered the dental record associated with that patient into the dental record database, as is discussed in more detail below. Upon the first entry of the patient authorization code, the patient may be directed to an on-line medical information release authorization to authorize the member dentist to maintain digital dental records. After this initial authorization, the patient user is directed to the home page (not shown) of the dentist who provided the patient authorization code to the patient user. From this dentist home page, the patient user may enter any of several different sections, including Patient General Chart 3 10, Reference Zone 320, Pharmacy Zone 330, Search 340, Help 350, and General IDT Information 360 (p. 18 lines 8-22).

As per claim 70, Papandreas et al. discloses "a data structure facilitating the communication of information pertaining to a referral from a referrer to a referee, the structure comprising: a collection of linked information units pertaining to the referral, at least some of said information units of said collection being operable to be modified, said information units of said collection including:"

"a referrer identifier identifying a referrer computer as being originator of said collection, said referrer computer being associated with said referrer," as the dentist

entry point provides for entry of new patient records, access to and edit of patient dental records entered by that dentist, and input of new entries into these patient dental records. Through the member dentist entry point, patient records and information may be disseminated to and accessed by other health professionals at the discretion of the dentist who entered the patient information (p. 3 lines 1-6).

"a referee identifier identifying a referee computer as an intended recipient of said collection, said referee computer being associated with said referee; and" as the patient entry point allows access by a dental patient to view or edit selected portions of his/her own dental record (p. 3 lines 10-11); and access through the various entry points is determined based on the access code entered by a user of the invention. The dentist will provide a patient authorization code to each of his patients for whom the dentist has input a patient dental record into the database. This authorization code will enable the patient to access the patient dental record associated with that patient and to access the other databases available through the patient entry point (p. 3 lines 16-21).

"a modification flag operable to indicate that a modification was made, from one of said referrer and referee computers, to at least one information unit of said collection" as each entry or modification into the patient dental record is also provided with a date stamp to reference when the entry or modification was made. The entries into the patient dental record may be sorted and displayed by date. Further, the entries may be provided with a version number, which is discussed in more detail below (p. 9 line 26 to p. 10 line 3).

As per claim 72, Papandreas et al. discloses "the data structure of claim 70 wherein said information units of said collection further include an event log operable to store an entry indicating occurrence of an event" as preferably, each time an entry is made to a record, selected previous entries to the record are copied and stored separate from the active database as a permanent backup record. Preferably, the selected previous entries include diagnostic and treatment entries. The backup record or the new entry or both are provided with a sequential version number which identifies the number of times a record is backed up or new entries are made the record. This enables a dentist, for example, to identify if there are new entries to be reviewed based on the version number of the record in the active database, provides for storage of a permanent backup copy of the record for security purposes, and may aid in the coordination of treatment with other dental professionals. A dentist may also request that a hard copy of the active record, backup record, or portions thereof be printed and provided for physical storage. Periodically, the record, or selected entries or portions thereof, may also be archived to a remote location by any method practicable, such as tape backup storage, removable electronic disk storage, etc. This will provide additional storage space for new records or new entries, while preserving the history of the existing records (p. 13 lines 8-24).

As per claim 74, Papandreas et al. discloses "the data structure of claim 70 wherein said information units of said collection further include at least one of a client name or identifier, a client date of birth, a need in respect of which the referral is made,

an urgency status associated with said need, a referrer name, and a referee name" as in the Patient Scheduling 111 area, the dentist may input, view, confirm, or modify daily appointments by patients. The dentist may also e-mail reminders to patients regarding upcoming appointments, respond to e-mails from patients with appointment requests, and automatically or manually e-mail notifications of needed appointments to patients. The information in this area may be viewed in a variety of ways, including by day, by week, by patient, and by name. This allows the dentist to actively and effectively manage his appointment calendar (p. 8 lines 6-13).

As per claim 76, Papandreas et al. discloses "the data structure of claim 70 wherein said information units of said collection further include at least one of a referral date sent field, a referral type field, a referral identifier field, a notes field, a client contacted field indicating whether said client was contacted about the referral, a certainty flag for indicating a level of certainty regarding a diagnosis, a referral status field, an appointment time field, a referral reason field, an appointment cancellation reason field, a carbon copy field, a payer field, an attached files status field, and an archived status field" as Figure 2 illustrates the architecture of the patient 110 section of the preferred embodiment. Once the dentist has entered the patient 110 section, he or she may access any of the following areas: Patient Scheduling 111, Patients General Charts 112, Medical Dental History Charts 113, General Exams 114, Prescriptions 115, Referral Slip/Extraction Slip 116, Diagnosis and Treatment Guide 117, Lab Request and

Tracking 118, IDT Specific Charts and Records 119, IDT Workflow/Application 120, and E-Statements for Billing 121 (p. 7 line 19 to p.8 line 5).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. **Claims 2, 3, 44, 45 and 73** are rejected under 35 U.S.C. 103(a) as being unpatentable over Papandreas et al. in view of Weeks, JR et al. (US Pub. No. 2003/0069754 A1).

As per **claim 2**, Papandreas et al. does not explicitly disclose "the method of claim 1 wherein causing information to be stored comprises causing a referral status flag, representing a status of said referral to be stored, in an information unit of said collection, and causing said referral status flag to be set to a first value to indicate that the collection has not yet been viewed by the referee". However, Weeks, JR et al. discloses as the recipient computer preferably has recipient software stored thereon. The recipient software preferably includes a recipient GUI for simplifying the data-entry process, a referral checker for accessing the server computer at regular intervals to determine whether or not a new referral is available, a secure recipient connector for

establishing private communication with the server computer, and a database of referred patient data for storing referrals transmitted to the recipient computer (par. [0010] lines 9-17); and transmitting a confirmation message from the recipient computer to the server computer responsive to a successful transmission of the completed referral form from the server computer to the recipient computer, and transmitting the confirmation message from the server computer to the originator computer (par. [0012] lines 14-19).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Weeks, JR et al. teaching of processing healthcare referrals into Papandreas et al. system in order to provide a method and systems for performing or processing referrals which reduces risk of duplication of communication, enhances confidence in referral origination and receipt, and more accurately tracks referral data (Weeks, JR et al., par. [0008] lines 11-15).

As per claim 3, Papandreas et al. does not explicitly disclose "the method of claim 2 further comprising causing said referral status flag to be set to a second value if at least one information unit of said collection has been displayed at said referee computer". However, Weeks, JR et al. discloses as the recipient accesses the recipient software in the recipient computer 12, preferably by clicking on an icon displayed on the monitor of the recipient computer 12 as understood by those skilled in the art. The secure connector 27 of the recipient computer 12 then transmits an encrypted connection request to the server computer 13. The encrypted connection request also

includes a unique alphanumeric recipient identification code that can be used to compare with a list of recipient identification codes previously stored in the database of recipients 38. A secure connection can be established if the unique recipient identification code transmitted by the recipient matches with one of the recipient identification codes stored in the database of recipients 38. Any referral contained in the database of referrals 37 for the above-mentioned matched recipient is then transmitted to the recipient computer 12. After the referral has been transmitted, the secure recipient connector 27 of the recipient computer 12 then transmits a confirmation of receipt of the referral back to the recipient confirmer 34 of the server computer 13. After receiving the confirmation from the recipient computer 12, the recipient confirmer 34 of the server computer 13 identifies the time of transmission and the patient information, and then stores all the referral information in the database of confirmations 39. If the originator computer 11 still has a secure connection with the server computer 13 at the time the recipient confirmer 34 generates the above-mentioned confirmation, the server computer 13 then immediately sends the confirmation to the originator computer 11 to provide an independent confirmation of the referral event (par. [0036]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Weeks, JR et al. teaching of processing healthcare referrals into Papandreas et al. system in order to provide a method and systems for performing or processing referrals which reduces risk of duplication of communication, enhances confidence in referral origination and receipt, and more accurately tracks referral data (Weeks, JR et al., par. [0008] lines 11-15).

As per claim 44, Papandreas et al. does not explicitly disclose “the apparatus of claim 43 wherein said codes include codes for directing said processor to cause a referral status flag to be stored in an information unit of said collection and to set said referral status flag to a set to a first value to indicate that the collection has not yet been viewed by the referee”. However, Weeks, JR et al. discloses as the recipient computer preferably has recipient software stored thereon. The recipient software preferably includes a recipient GUI for simplifying the data-entry process, a referral checker for accessing the server computer at regular intervals to determine whether or not a new referral is available, a secure recipient connector for establishing private communication with the server computer, and a database of referred patient data for storing referrals transmitted to the recipient computer (par. [0010] lines 9-17); and transmitting a confirmation message from the recipient computer to the server computer responsive to a successful transmission of the completed referral form from the server computer to the recipient computer, and transmitting the confirmation message from the server computer to the originator computer (par. [0012] lines 14-19).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Weeks, JR et al. teaching of processing healthcare referrals into Papandreas et al. system in order to provide a method and systems for performing or processing referrals which reduces risk of duplication of communication, enhances confidence in referral origination and receipt, and more accurately tracks referral data (Weeks, JR et al., par. [0008] lines 11-15).

As per claim 45, Papandreas et al. does not explicitly disclose “the apparatus of claim 44 wherein said codes include codes for directing said processor to cause said referral status flag to be set to a second value if at least one information unit of said collection has been displayed at said referee computer”. However, Weeks, JR et al. discloses as the recipient accesses the recipient software in the recipient computer 12, preferably by clicking on an icon displayed on the monitor of the recipient computer 12 as understood by those skilled in the art. The secure connector 27 of the recipient computer 12 then transmits an encrypted connection request to the server computer 13. The encrypted connection request also includes a unique alphanumeric recipient identification code that can be used to compare with a list of recipient identification codes previously stored in the database of recipients 38. A secure connection can be established if the unique recipient identification code transmitted by the recipient matches with one of the recipient identification codes stored in the database of recipients 38. Any referral contained in the database of referrals 37 for the above-mentioned matched recipient is then transmitted to the recipient computer 12. After the referral has been transmitted, the secure recipient connector 27 of the recipient computer 12 then transmits a confirmation of receipt of the referral back to the recipient confirmer 34 of the server computer 13. After receiving the confirmation from the recipient computer 12, the recipient confirmer 34 of the server computer 13 identifies the time of transmission and the patient information, and then stores all the referral information in the database of confirmations 39. If the originator computer 11 still has a

secure connection with the server computer 13 at the time the recipient confirmer 34 generates the above-mentioned confirmation, the server computer 13 then immediately sends the confirmation to the originator computer 11 to provide an independent confirmation of the referral event (par. [0036]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Weeks, JR et al. teaching of processing healthcare referrals into Papandreas et al. system in order to provide a method and systems for performing or processing referrals which reduces risk of duplication of communication, enhances confidence in referral origination and receipt, and more accurately tracks referral data (Weeks, JR et al., par. [0008] lines 11-15).

As per claim 73, Papandreas et al. discloses "the data structure of claim 70 wherein said information units of said collection further include a referral status field operable to indicate a referral status comprising at least one of:"

"an appointment set status signifying that an appointment has been set for the referral represented by said collection; a cancelled status signifying that the referral represented by said collection has been cancelled; and" as in the Patient Scheduling 111 area, the dentist may input, view, confirm, or modify daily appointments by patients. The dentist may also e-mail reminders to patients regarding upcoming appointments, respond to e-mails from patients with appointment requests, and automatically or manually e-mail notifications of needed appointments to patients. The information in this area may be viewed in a variety of ways, including by day, by week, by patient, and by

name. This allows the dentist to actively and effectively manage his appointment calendar (p. 8 lines 6-13).

"a completed status signifying that the referral represented by said collection has been completed by said referee" as the patient user will be able to add or modify selected entries in the patient General Chart 310 section, but will only be able to view other information in this section. The dentist who enters the dental record into the database and provides the patient authorization code will initially determine the information accessible and modifiable by the patient user (p. 19 lines 7-11); and the patient may also be able to correspond directly with the dentist using a message area via the patient entry point 300 in order to ask questions, schedule an appointment, request a prescription from the dentist, or request information. This may be integrated into the patient General Chart 310 section or in another section or area of the patient entry point 300 (p. 19 lines 17-21).

Papandreas et al. does not explicitly disclose "an unread status signifying that said collection has not been viewed from said referee computer". However, Weeks, JR et al. discloses as the recipient accesses the recipient software in the recipient computer 12, preferably by clicking on an icon displayed on the monitor of the recipient computer 12 as understood by those skilled in the art. The secure connector 27 of the recipient computer 12 then transmits an encrypted connection request to the server computer 13. The encrypted connection request also includes a unique alphanumeric recipient identification code that can be used to compare with a list of recipient identification codes previously stored in the database of recipients 38. A secure

connection can be established if the unique recipient identification code transmitted by the recipient matches with one of the recipient identification codes stored in the database of recipients 38. Any referral contained in the database of referrals 37 for the above-mentioned matched recipient is then transmitted to the recipient computer 12. After the referral has been transmitted, the secure recipient connector 27 of the recipient computer 12 then transmits a confirmation of receipt of the referral back to the recipient confirmer 34 of the server computer 13. After receiving the confirmation from the recipient computer 12, the recipient confirmer 34 of the server computer 13 identifies the time of transmission and the patient information, and then stores all the referral information in the database of confirmations 39. If the originator computer 11 still has a secure connection with the server computer 13 at the time the recipient confirmer 34 generates the above-mentioned confirmation, the server computer 13 then immediately sends the confirmation to the originator computer 11 to provide an independent confirmation of the referral event (par. [0036]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Weeks, JR et al. teaching of processing healthcare referrals into Papandreas et al. system in order to provide a method and systems for performing or processing referrals which reduces risk of duplication of communication, enhances confidence in referral origination and receipt, and more accurately tracks referral data (Weeks, JR et al., par. [0008] lines 11-15).

13. **Claim 31** is rejected under 35 U.S.C. 103(a) as being unpatentable Papandreas et al. in view of Solis et al. (US Pub. No. 2005/0262088 A1).

As per **claim 31**, Papandreas et al. does not explicitly disclose "the method of claim 30 wherein said computer-readable codes are interpretable by a markup language interpreter". However, Solis et al. discloses as all of the data submitted to the web is saved in an XML document. By storing it in XML, an auditor can compare and contrast similar fields, and provide indexing capabilities on certain data elements. Less preferably, if the audit data is stored as text, extracting data for audit reporting purposes is more difficult. Preferably, the database server software (such as that provided by Oracle) includes features to add database indexes to XML data types. The R3 system uses these "context indexes" to index the XML by referral ID, which is the most common view of the data within the R3 system (par. [0207]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Solis et al. teaching of storing and delivering data related to donors and recipients of human organs and tissue into Papandreas et al. system in order to provide an organ procurement organization (OPO) with data entry and data tracking features to track all referrals, potential donors, and actual donors within the area of responsibility of the particular OPO (Solis et al., par. [0162] lines 1-4).

14. **Claims 38 and 71** are rejected under 35 U.S.C. 103(a) as being unpatentable over Papandreas et al. in view of Torrey (US Pat. No. 6,457,005 B1).

As per claim 38, Papandreas et al. does not explicitly disclose “a computer-readable medium comprising codes for directing a processor circuit to perform the method recited in claim 1”. However, Torrey discloses as FIG. 2 is a block diagram of computer system 50 that may be used to provide services to an originator, a party, or a referral management system. CPU 52 provides computing resources. Input control 53 represents an interface to input device 54 such as a keyboard or mouse. RAM 59 is system random access memory (RAM). Storage control 55 represents an interface to storage device 56 that includes a storage medium such as magnetic tape or disk, or an optical medium. The storage medium may be used to record programs of instructions for operating systems, utilities and applications, and may include embodiments of programs that implement various aspects of the present invention. In computer system 30, storage device 56 may also be used to record opportunity, party and resource information needed to provide a referral management system. Display control 57 provides an interface to display device 58. Communication control 47 represents an interface to communication channel 42 that connects to communication facility 40 (col. 10 line 59 to col. 11 line 9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Torrey teaching of using computers and networks to manage referrals into Papandreas et al. system in order to develop and manage a large referral network by which resources may be referred to entities that have need for such resources (Torrey, col. 1 lines 63-65).

As per claim 71, Papandreas et al. does not explicitly disclose "a computer-readable medium encoded with the data structure of claim 70". However, Torrey discloses as FIG. 2 is a block diagram of computer system 50 that may be used to provide services to an originator, a party, or a referral management system. CPU 52 provides computing resources. Input control 53 represents an interface to input device 54 such as a keyboard or mouse. RAM 59 is system random access memory (RAM). Storage control 55 represents an interface to storage device 56 that includes a storage medium such as magnetic tape or disk, or an optical medium. The storage medium may be used to record programs of instructions for operating systems, utilities and applications, and may include embodiments of programs that implement various aspects of the present invention. In computer system 30, storage device 56 may also be used to record opportunity, party and resource information needed to provide a referral management system. Display control 57 provides an interface to display device 58. Communication control 47 represents an interface to communication channel 42 that connects to communication facility 40 (col. 10 line 59 to col. 11 line 9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Torrey teaching of using computers and networks to manage referrals into Papandreas et al. system in order to develop and manage a large referral network by which resources may be referred to entities that have need for such resources (Torrey, col. 1 lines 63-65).

15. **Claims 46-48 and 75** are rejected under 35 U.S.C. 103(a) as being unpatentable over Papandreas et al. in view of Dascalu (US Pub. No. 2003/0177277 A1).

As per **claim 46**, Papandreas et al. does not explicitly disclose "the apparatus of claim 43 wherein said codes include codes for directing said processor to cause, in said database, to identify said collections of information units that satisfy said criterion". However, Dascalu discloses as information about the status of the proposed connection more preferably includes, but is not limited to, one or more of the following: Anonymous-request for contact was sent from seeker to referral; Referral_approved; Referral_rejected; Operator_approved; Operator_rejected; Seeker_approved and Seeker_rejected. The terms "operator_approved" and "operator_rejected" optionally and more preferably refer to an optional but preferred embodiment of the present invention, in which an operator controls one or more aspects of the personal referral process (par. [0037]); and each message table 38 preferably includes one or more of the following information: a message identifier; a notification identifier; a connection identifier (points to connections in connection table 36); a sender (points to the user who sent the message); a recipient (points to the user who received the message); a date; a message type; and a message status. Examples of the message status according to the present invention include, but are not limited to, one or more of the following; Waiting (for operator approval); Rejected (by an operator); and Approved (now the recipient can see it). Examples of a message type include but are not limited to, one or more of the

following: simple message, request for contact, reject message, accept message, and target suggestion (par. [0038] lines 4-17).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Dascalu teaching of effecting and managing personal referrals into Papandreas et al. system in order to support personal referrals, between an individual seeking the referral (hereinafter, the seeking individual) and the individual who is able to perform the referral (hereinafter, the referring individual) (Dascalu, par. [0005] lines 3-6).

As per claim 47, Papandreas et al. does not explicitly disclose "the apparatus of claim 46 wherein said codes include codes for directing said processor to cause said database to identify collections having a referral status flag satisfying a referral status criterion". However, Dascalu discloses as information about the status of the proposed connection more preferably includes, but is not limited to, one or more of the following: Anonymous--request for contact was sent from seeker to referral; Referral_approved; Referral_rejected; Operator_approved; Operator_rejected; Seeker_approved and Seeker_rejected. The terms "operator_approved" and "operator_rejected" optionally and more preferably refer to an optional but preferred embodiment of the present invention, in which an operator controls one or more aspects of the personal referral process (par. [0037]); and each message table 38 preferably includes one or more of the following information: a message identifier; a notification identifier; a connection identifier (points to connections in connection table 36); a sender (points to the user who sent the

message); a recipient (points to the user who received the message); a date; a message type; and a message status. Examples of the message status according to the present invention include, but are not limited to, one or more of the following: Waiting (for operator approval); Rejected (by an operator); and Approved (now the recipient can see it). Examples of a message type include but are not limited to, one or more of the following: simple message, request for contact, reject message, accept message, and target suggestion (par. [0038] lines 4-17).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Dascalu teaching of effecting and managing personal referrals into Papandreas et al. system in order to support personal referrals, between an individual seeking the referral (hereinafter, the seeking individual) and the individual who is able to perform the referral (hereinafter, the referring individual) (Dascalu, par. [0005] lines 3-6).

As per claim 48, Papandreas et al. discloses "the apparatus of claim 46 wherein said codes comprise codes for directing said processor to cause said database to identify collections including at least one of said referrer identifier and said referee identifier" as access through the various entry points is determined based on the access code entered by a user of the invention. The dentist will provide a patient authorization code to each of his patients for whom the dentist has input a patient dental record into the database. This authorization code will enable the patient to access the patient

dental record associated with that patient and to access the other databases available through the patient entry point (p. 3 lines 16-21).

As per claim 75, Papandreas et al. does not explicitly disclose "the data structure of claim 70 wherein said information units of said collection further include at least one of: a wait list priority field indicating a priority of the referral represented by said collection in a waitlist of said referee; a wait list status field indicating a status of the referral in said waitlist; and a waitlist reason field indicating a reason for placing the referral on said waitlist". However, Dascalu discloses as the referral process may also optionally include sending messages between different components of the system of the present invention, such as the seeking user and the referring user, for example. Each message table 38 preferably includes one or more of the following information: a message identifier; a notification identifier; a connection identifier (points to connections in connection table 36); a sender (points to the user who sent the message); a recipient (points to the user who received the message); a date; a message type; and a message status. Examples of the message status according to the present invention include, but are not limited to, one or more of the following; Waiting (for operator approval); Rejected (by an operator); and Approved (now the recipient can see it). Examples of a message type include but are not limited to, one or more of the following: simple message, request for contact, reject message, accept message, and target suggestion (par. [0038]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Dascalu teaching of effecting and managing personal referrals into Papandreas et al. system in order to support personal referrals, between an individual seeking the referral (hereinafter, the seeking individual) and the individual who is able to perform the referral (hereinafter, the referring individual) (Dascalu, par. [0005] lines 3-6).

16. **Claim 4** is rejected under 35 U.S.C. 103(a) as being unpatentable over Papandreas et al. in view of Weeks, JR et al., and further in view of Dascalu.

As per **claim 4**, Papandreas et al. and Weeks, JR et al. do not explicitly disclose "the method of claim 2 wherein identifying collections comprises identifying collections having a referral status flag satisfying a referral status criterion". However, Dascalu discloses as information about the status of the proposed connection more preferably includes, but is not limited to, one or more of the following: Anonymous--request for contact was sent from seeker to referral; Referral_approved; Referral_rejected; Operator_approved; Operator_rejected; Seeker_approved and Seeker_rejected. The terms "operator_approved" and "operator_rejected" optionally and more preferably refer to an optional but preferred embodiment of the present invention, in which an operator controls one or more aspects of the personal referral process (par. [0037]); and each message table 38 preferably includes one or more of the following information: a message identifier; a notification identifier; a connection identifier (points to connections

in connection table 36); a sender (points to the user who sent the message); a recipient (points to the user who received the message); a date; a message type; and a message status. Examples of the message status according to the present invention include, but are not limited to, one or more of the following; Waiting (for operator approval); Rejected (by an operator); and Approved (now the recipient can see it). Examples of a message type include but are not limited to, one or more of the following: simple message, request for contact, reject message, accept message, and target suggestion (par. [0038] lines 4-17).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Dascalu teaching of effecting and managing personal referrals into Papandreas et al. and Weeks, JR et al. systems in order to support personal referrals, between an individual seeking the referral (hereinafter, the seeking individual) and the individual who is able to perform the referral (hereinafter, the referring individual) (Dascalu, par. [0005] lines 3-6).

Conclusion

17. The following prior art made of record on form PTO-892 and not relied upon is cited to establish the level of skill in the applicant's art and those arts considered reasonably pertinent to applicant's disclosure. See **MPEP 707.059(c)**.

US-2001/0034631 A1

US-2002/0026329 A1

US-2002/0165732 A1

18. The examiner requests, in response to this Office Action, support is shown for language added to any original claims on amendment and any new claims. That is, indicate support for newly added claim language by specifically pointing to page(s) and line number(s) in the specification and/or drawing figure(s). This will assist the examiner in prosecuting the application.

19. When responding to this Office Action, applicant is advised to clearly point out the patentable novelty which he or she thinks the claims present, in view of the state of the art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections See 37 CFR 1.111(c).

Contact Information

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bai D. Vu whose telephone number is 571-270-1751. The examiner can normally be reached on Mon - Fri 7:30 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christian Chace can be reached on 571-272-4190. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2169

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bai D Vu/
Examiner, Art Unit 2165
03/25/2008

/C. T. T./
Primary Examiner, Art Unit 2162

/Christian P. Chace/
Supervisory Patent Examiner, Art Unit 2169

